## **CLAIMS**

1. A measurement electronic device system comprising: a plurality of measurement electronic device units each having a measurement detector connected thereto and having a measuring function, the plural measurement electronic device units being connected in series by connectors to be capable of mutually conveying measurement data and signals, and one of the plural measurement electronic device units serving as a parent device having a function of transmitting/receiving measurement data and signals to/from an external device,

5

10

15

20

wherein each of said plural measurement electronic device units has a memory storing a measured value, and said parent device has a means for issuing a measured value save command to said plural measurement electronic device units including the own unit, in response to a request from the external device, to thereby cause said plural measurement electronic device units to simultaneously save measured values by the respective detectors in the memories.

- 2. The measurement electronic device system according to claim 1, wherein said measurement electronic device unit as the parent device has a means for causing all said measurement electronic device units including the own unit which are connected in series to save the measured values by the respective detectors in the memories, also in response to an externally supplied measured value save command.
- 3. The measurement electronic device system according to claim 1 or claim 2,

wherein said measurement electronic device unit as the parent device has a means for selectively changing connection of a signal line connected to the other measurement electronic device units to one of a signal line from an external device and a signal line of an internal output.

5

10

15

20

25

4. The measurement electronic device system according to any one of claim 1 to claim 3,

wherein each of said measurement electronic device units except the parent device has a means for disconnecting mutually coupled signal lines to change connection to a signal line from an external part.

5. The measurement electronic device system according to any one of claim 1 to claim 4,

wherein each of said plural measurement electronic device units includes: a storing means for storing an operation parameter; and an arithmetic means for performing an arithmetic operation on the measured value saved in the memory, based on the parameter stored in the storing means.

6. The measurement electronic device system according to claim 5,

wherein said measurement electronic device unit as the parent device further includes a sum calculating means for calculating a sum of individual operation results calculated by the arithmetic means in the measurement electronic device units designated out of said plural measurement electronic device units.

7. The measurement electronic device system according to any one of claim 1 to claim 6,

wherein each of said plural measurement electronic device units is comprises: a main body housing the connector for mutual series connection and said respective means; and a display unit attachable/detachable to/from the main body, the display unit including: a display displaying the measured value and the parameter; and operation keys, and the main body and the display unit including connectors that directly connect the main body and the display unit mechanically and electrically when the display unit is attached to

the main body and that allow the main body and the display unit to be electrically connected via a connecting line when the display unit is detached from the main body.